International POPs Elimination Project

Fostering Active and Efficient Civil Society Participation in Preparation for Implementation of the Stockholm Convention

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Public participation in IPPC procedure: Set of plants for elimination of old ecological burdens – Project Spolana - dioxins

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About the International POPs Elimination Project

On May 1, 2004, the International POPs Elimination Network (IPEN http://www.ipen.org) began a global NGO project called the International POPs Elimination Project (IPEP) in partnership with the United Nations Industrial Development Organization (UNIDO) and the United Nations Environment Program (UNEP). The Global Environment Facility (GEF) provided core funding for the project.

IPEP has three principal objectives:

- Encourage and enable NGOs in 40 developing and transitional countries to engage in activities that provide concrete and immediate contributions to country efforts in preparing for the implementation of the Stockholm Convention;

- Enhance the skills and knowledge of NGOs to help build their capacity as effective stakeholders in the Convention implementation process;

- Help establish regional and national NGO coordination and capacity in all regions of the world in support of longer term efforts to achieve chemical safety.

IPEP will support preparation of reports on country situation, hotspots, policy briefs, and regional activities. Three principal types of activities will be supported by IPEP: participation in the National Implementation Plan, training and awareness workshops, and public information and awareness campaigns.

For more information, please see http://www.ipen.org

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The views expressed in this report are those of the authors and not necessarily the views of the institutions providing management and/or financial support.

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1. Introduction to the project activity on IPPC

The main goal of the integrated pollution prevention and control (IPPC) is to reach the highest extent of protection of the environment and humans. The protective activities are based on the elimination or at least on the minimization of the emissions from industrial sources (Appendix 1) to the air, water and land, including the precautions regarding waste minimization and prevention. Since IPPC includes citizen participation, we decided to participate in the process for a facility involved in the release of POPs.

The IPPC procedure so far does not enable stopping operation of an already running company. This is given by fact that, 1) all functioning plants in the Czech Republic must have settled conditions of operation according to Czech laws and they must get necessary permissions – for instance for releases of waste water containing hazardous chemicals etc. 2) The difficulty of stopping the operating plants in the course of IPPC procedure is also explained by the fact that operators try to apply for the integrated license early, in advance of the year when their operation would not be allowed without the license. State and local authorities nowadays have a competency to stop or quit the operation of plants if they do not observe the conditions for work (i.e. breaking of emission limits, not observing duty of announcement to the state and local authorities etc.) but despite this fact problematic plants are not closed too often in the Czech Republic.

On the other hand, the essence and contribution of the IPPC procedure lies in the fact that the public can influence the conditions of operation in the plants – not only those newly built but mainly those already operating for some time.

Practical enforcement of the idea of IPPC is still at he beginning in the Czech Republic and that is why participation of citizens and civic associations is very important for the following reasons:

1. Applicants for the IPPC for some plants, mainly for those which are and/or will represent a source of hazardous emissions, often do not include important information and suggestions in the application. For instance:

- Applicant did not submit a monitoring of all or of at least important hazardous substances that may be released to the environment from the plant. Such substances are first of all POPs, chemicals and products that are proven carcinogens or mutagens during their air transmission or they harm reproduction.
- Applicant asks for the license for the plant even though parts of it are not in accordance with the BAT – e.g. emissions, noise, energy consumption etc.

2. Some participants in the IPPC procedure can require conditions which can threaten the environment and human health as they represent the fastest solution to a particular problem the plant has (e.g. in this case Spolana which demanded direct combustion of materials which could be decontaminated).

3. Regional offices show an unwillingness to set stricter conditions for the plants and stricter limits for hazardous waste, or they do not set them at all, although the Law on IPPC gives them legal support for such steps like strict conditions and limits ensuring a radical check of the plants. As a material for their work, the offices can use Appendix 2 of the Law on IPPC

which lists the main pollutants for the settlement of the emission limits (Appendix 1). The offices do not do this though the plants they decide about:

- Are often located close to rivers, town/cities and villages or they lay directly inside the residential areas, in their center etc.
- Release hazardous chemicals such as POPs (mostly PCDD/F, HCB and PCB) to the air, water and soil) which have carcinogenic or mutagenic effects or harm reproductive, or nervous or endocrine systems etc.
- Have or might have problems with the security of their operation (lack of radical evaluation of all possible risks – accidents, floods etc.)
- Produce waste contaminated by hazardous waste such as POPs, heavy metals etc.

4. Citizens, civic associations etc. can point on serious insufficiencies (e.g. not proposing the limits for some hazardous waste used in the operation produced either intentionally or as by-products, and their monitoring etc.), and they can also prevent settlement of conditions of IPPC which would loosen strict work conditions or reduce checking and emission monitoring.

2. IPPC procedure – basic characteristics

2.1 Law No. 76 on the IPPC

The European Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control (IPPC) – was embodied into Czech legislation by adoption of the Law No. 76 on the IPPC, integrated pollution inventory and with a change of some related laws (law on the integrated pollution prevention). The statutory text of the Law No. 76 on the IPPC, including particular notices and amendments are accessible for public viewing on the web pages of the Czech Ministry of Environment. (1)

Another related regulation is directive is 2003/35/ES **of 26 May 2003 about public participation on the elaboration of some environmental plans and programmes and about a change of directives 85/337/EEC and 96/61/EC about public participation and access to legal protection. This directive (**2003/35/ES**) implemented the Aarhus Convention, which is proclaimed in a Czech legal order by a notice No. 124/2004 of the Collection of International Agreements.**

The purpose of Law No. 76/2002 on integrated pollution prevention is, in accordance with the EU legislation, to reach a high level of environmental protection as a whole, to ensure integrated output of public administration in licensing operation of plants, and to establish and run the integrated inventory of environmental pollution.

Informative web pages (3) run by the Czech Ministry of Trade and Industry (4) together with Ministry of Environment (5), Ministry of Agriculture (6), Czech Environmental Information Agency – CENIA (7), and Czech Environmental Inspection (8) include necessary information about the IPPC procedure. A special web page of the Ministry of Environment (9) publishes all requests for the integrated license, a brief non-technical summary of data from the applications, decisions about licenses made by particular local authority, and statements of agencies. There is also information on which phase a particular request is in – either initiation of the procedure, negotiation, decision-making, recall etc.

2.2 IPPC procedure

The application procedure for the integrated license is complicated and long-lasting – in extreme cases it can take more than a year.

The Ministry of Environment appealed to operators of IPPC plants to co-submit the applications to the local authorities as soon as possible. The deadline is 30.10.2007 for all plants under the law on IPPC. Table 1 gives information on when a plant must have the integrated license according to the law.

Table 1: Information for operators of IPPC plants which are required to get integrated license according to the Law on integrated prevention (Source: Ministry of Environment – *http://www.env.cz/ippc*)

Type of plant/equipment	Type of plant/equipment	Duty for operator
Type I (accord. §42)	Plants which did not apply for building license till 30 October 1999 and which at the same time started working by 30 Oct. 2000	To have integrated license by 30 Oct. 2007 in case they want to run the plant after 2007
Type II (accord. §43)	Plants which started operation before 1.1. 2003 which at the same time do not belong to the type I or plants with building licenses issued by 1.1. 2003 which did not start operation by this date	To apply for the integrated license by 31.3.2003 and operate it further in accordance with §16 of the Law
Type III (amendment §45)	Plants with the application for building license submitted by 31.12.2002 with building license not issued before 1.1. 2003	To have the integrated license for the proposal for initiating the final building decision
Type IV (accord. §45)	Plants with application for building license submitted after 1.1.2003 (including this date)	To have integrated license before the building license

3. Procedure of application for the integrated license for BCD CZ, stock company – "Set of plants for removal of old ecological burdens – Project Spolana – Dioxins"

The old ecological burden of so called dioxin barracks – contamination of objects A1420 and A1030 in the area of chemical plant Spolana appeared as undesired consequence of producing substances for herbicide, insecticide and fungicide preparations known under names Agronal H, Arboricid E 50, Arboricid EC 50 and Pentadiol.

The IPPC procedure "Set of plants for removal of old ecological burdens – Project Spolana – Dioxins" was preceded by the EIA procedure (Environmental Impact Assessment). The information about this procedure is available on websites about information systems EIA (10) which publish all EIA procedures – documentation, assessments, standpoints of the Environment Ministry etc.

The application for the integrated license (IPPC procedure) was the last step the operator of BCD had to do. The technology was chosen by the Czech National Property Fund for cleaning soil and building materials. Operator using BCD technology could start working as late as after the issued integrated license became valid. The issued license lists obligatory conditions of the operation such as emission limits flowing from Czech or European legislation. It also specifies the kinds of hazardous waste the operator of BCD technology can treat or manipulate.

4. Time course of the IPPC procedure

9 December 2004 – The Local Authority of Central Bohemia initiated the IPPC procedure for the plant "Set of plants for removal of old ecological burdens – Project Spolana – Dioxins". Procedure started after BCD CZ Company submitted the application to the Local Authority of Central Bohemia.

20 December 2004 – The document "Brief non-technical summary of data listed in the application" was published on web pages of the Ministry of Environment (11)

3 January 2005 – Arnika applied as participant in the procedure on 3 January 2005 both electronically and by a letter.

5 January 2005 – The Local Authority sent letter to Arnika on 5 January 2005 which was said that Arnika was approved as a proper participant of the procedure. The Local Authority also sent appropriate documentation to Arnika with an appeal to submit its statement as a proper participant in the procedure within 30 days. The Local Authority also asked Arnika to substantiate its legal identity including name, identification number, statutory documents, trust deeds, which is entitled to represent the organization, and eventually written authorization for the representative of Arnika Association. The documents had to be sent within seven days after receiving the letter.

13 January 2005 – Arnika sent the demanded documents to the Local Authority on 13 January 2005

19 January 2005 – A relevant document to the IPPC application was removed from the web pages of the Ministry of Environment. The title of the document was "Brief non-technical summary of data listed in application."

14 February 2005 – Arnika sent its comments concerning the application of BCD CZ to the Central Bohemian Local Authority

15 March 2005 – A statement of the expert was published on the web pages of the Ministry of Environment (12)

4 April 2004 – The first negotiation of the IPPC procedure took place in the office of the Local Authority. The negotiation was ordered by a letter written by the Local Authority of 14 March 2005, addressed to all participants of the procedure.

11 April 2004 – The second negotiation of the IPPC procedure occurred on this day. The Local Authority decided on this date during the first meeting.

14 April 2005 – The statement of the expert was removed from the web pages of the Ministry of Environment

9 May 2005 – The Local Authority issued the decision – integrated permission -and sent it to the participants with instructions that they could request a recall against it within 15 days after the announcement to the Ministry of Environment with the mediation of the office.

31 May 2005 – Decision – integrated permission - issued by the Local Authority became valid.

6 June 2005 – Decision – integrated permission - of the Local Authority was published on the web pages of the Ministry of Environment (9)

5. Brief content of application for integrated license for "Set of plants for removal of old ecological burdens – Project Spolana – Dioxins"

5.1 General information

A brief non-technical summary of data listed in the application was available on the web pages of the Ministry of Environment (9).

A detailed application with appendices was sent only to particular administrative bodies and persons or organizations which participate in the procedure (Law No. 76/2002), and the applied participants.

5.2 Participants of the IPPC procedure – procedure "Set of plants for removal of old ecological burdens – Project Spolana – Dioxins"

Participants of the procedure:
- Applicant – BCD stock company
- Municipality Neratovice
- Central Bohemian Local Authority
- Water Management Elbe (Povodí Labe) based in Hradec Králové
- Chemical plant Spolana stock company

Other participants:
- Arnika – Programme Toxics and Waste – applied as participant of the procedure in legal terms.

State administrative bodies related to the matter:
- Czech Environmental Inspection
- Regional Public Health Station, Central Bohemia
- Ministry of Health – it rejected its position of a body related to this procedure

Two vocational authorities were addressed due to the procedure: CZ BIJO Ltd. and Czech Ecological Institute (now CENIA).

5.3 Brief content of application procedure "Set of plants for removal of old ecological burdens – Project Spolana – Dioxins"

Description of plant and directly connected activities

The technological unit is considered as a plant for treatment of hazardous waste (§14 section 1 of the Law No. 185/2001). The plant consists of construction works and a set of technical cleaning equipment.

a) Technical and technological units according to appendix No.1 of the Law No. 76/2002 on integrated prevention

Indirect thermic desorption – ITD

- 5.1 - Plant for elimination or utilization of hazardous waste and plant or treatment of waste oils, both with a capacity over 10 tonnes/day
- the maximum installed capacity: 168 tonnes/day
- the maximum output of heating the rotation furnace (kiln) by a burner incinerating natural gas: 4 MW
- large source of air pollution (outputs are added together)

Furnace for metallic waste

- 5.1 – Equipment of elimination or utilization of hazardous waste and plant or treatment of waste oils, both with capacity over 10 tonnes/day
- the maximum installed capacity: 14 t/d

Reactors for alkali catalytic disintegration – BCD technology

- Equipment of elimination or utilization of hazardous waste and plant or treatment of waste oils, both with capacity over 10 tonnes/day
- the maximum installed capacity: 9,9 tonnes/day
- the maximum output of heating the rotation furnace (kiln) by a burner incinerating natural gas: 4 MW
- large source of air pollution

Unit of air protection – APS (Air protection system)

- Equipment for elimination or utilization of hazardous waste and plant or treatment of waste oils, both with capacity over 10 tonnes/day
- the maximum installed capacity: 400 m^3 /hour air
- especially large source of air pollution

Under pressure vacuum draining system equipped with equipment for pre-cleaning of air released to the atmosphere

- draining of air from operation area in cleaned objects a 1420 and A 1030 and from a processing building with related space
- the maximum installed capacity: 210 000 m^3 /hour air
- especially large source of air pollution

b) Technical and technological units out of a frame of appendix No. 1 of the Law No. 76/2002 on IPPC

Storage of oil
- double-coated vertical reservoirs with a shelter
- the maximum installed capacity: 4 x 20 m^3

Storage of fuel for diesel motors
- double-coated horizontal reservoirs (Bencalor type)
- the maximum installed capacity: 1 x 10 m^3

Water refrigerating system
- circulation refrigerating circle with cooling towers
- the maximum installed capacity: 280 m^3/hour, temperature decrease 40/25^oC.

Production of water refrigerated by a machine
- equipment consists of a compressor unit, transformers, pumps and control unit
- the maximum installed capacity: 101 kW
- Special waste water cleaning plant
- Oxidation cleaning technology with a use of ozone and oxygen peroxide
- the maximum installed capacity: 35 m^3 /day

Unit for refrigeration of decontaminated material
- refrigeration of decontaminated material in the output from the indirect thermic desorption. The waste is refrigerated in a shovel transporter which is drained. Drained steams and dust are processed in a condensation system.

Decontamination station for person and technician
- personal decontamination station with the optimum underpressure 20 Pa equipped by a decontamination shower with a tank catching contaminated water. The decontamination station for the technique is equipped with high pressure water cleaning with a tank catching contaminated water.

b) <u>Directly related activities</u>

Construction works
Dust draining
Waste separation
Waste crushing
Waste cutting
Waste homogenisation
Waste collecting and keeping them for processing
Treatment of waste gained by the decontamination
Laboratory work
Monitoring

6. Statement to the application for IPPC

6.1. Statement of the participants

The following participants of the procedure sent their statements concerning the application for integrated license to the Local Authority:

- Central Bohemian Regional Office, negotiation number /17168/2005/OŽP of 15 February 2005
- Arnika – Toxics and Waste Programme of 14 February 2005
- Spolana, negotiation number 44950/587/2005 of 19 January 2005
- Central Bohemian Local Authority, negotiation number 115/2005/SHT of 10 January 2005
- Czech Environmental Inspection Prague, negotiation number 1/HI/12041/04/Ber of 27 August 2004 – had no comments
- Regional Public Health Station – Central Bohemia, negotiation number 4018-241/04/ME of 17 January 2005
- Municipal Office Neratovice, Environmental department, negotiation number 25482/2164/04/OŽP/IPPC of 20 January 2005
- Water Treatment Elbe (Povodí Labe) Hradec Králové, negotiation number 950001/Si/04/37781 of 19 January 2005

The submitted comments had to be settled by an expert, in this case it was: BIJO CZ, Agency of Integrated Prevention, now Cenia (7). The statement of the expert was then published on the web pages of the Ministry of Environment (12).

The office received two statements (from CZ BIJO and Cenia). The first one lacked proprieties as required by the Methodical instruction of the Ministry of Environment and was completely vague and was used in the procedure just as one of materials (14).

6.2. Comments by the participants of procedure

Only selected comments of other participants are listed in this section. A summary of the comments and settlement of the expert is in the statement of the expert Cenia (12) which served here as a source of information.

a) Public Health Station – issue of a noise, monitoring of noise emissions and of pollutants including PCDD/Fs
b) Central Bohemian Local Authority – has no comments on the application, it demands that conditions which will be in the standpoint of the Ministry of Environment according to the Law No. 100/2001 on EIA, should be fully taken into account.
c) Spolana – disagreement with the use of decontaminated glass, wood, textile and other waste for powdering surface of terrain, because this area is to be consequently used as industrial zone. It also wanted the widening of emission monitoring by the certified company from ventilation from technological units (air protection units and two other units and widening emission monitoring by PAH and PCBs.

d) The Local Authority, Department of Environment and Agriculture – rewriting the document "Operational order of waste utilization equipment", all waste passed over to

entitled persons must be accompanied by submitting a document on ensuring their utilization or elimination, to complete emission limits of air pollutants in waste water cleaning plant, including monitoring, to complete monitoring in units under pressure system (ventilation) and total organic carbon (TOC) and units of air protection with hexachlorocyclohexane (HCH), hexachlorobenzene (HCB) and polychlorinated phenols (PCP), monitoring of air pollutants by PCDD/Fs, to specify what will be done with souring water in final phase; to explain fulfillment of emission limit of 0,1 ng TEQ/m^3 for total weight concentration PCDD/F.

e) Czech Environmental Inspection Prague – had no comments
f) Municipal Office Neratovice – had no objections for issuing the integrated permission for BCD CZ company if a) the Ministry of Environment will publish agreeing statement according to §10 of the Law No. 100/2001 for this project; b) the conditions of standpoint published by the Ministry of the Environment will be fulfilled c) and it will be secured that the waste water cleaning plant will not release PCDD/Fs or other pollutants from a ventilation, which could threaten air quality, not even by a accumulation of effects of pollutants released to atmosphere from other parts of ventilation of the entire plant.
g) Water Management Elbe – issued a positive statement under the condition that number of usual conditions for operation of this type of plant is fulfilled in relation to water.

6.3 Brief summary of statements and comments submitted by Arnika - Toxics and Waste Programme

Arnika had following essential comments and requirements to the application:

Generally

- To interrupt IPPC procedure till the time when a final statement of EIA procedure will be published
- To compare chosen elimination technology with other available technologies and their parameters (Arnika listed concrete technologies such as "Gas Phase Chemical Reduction – GPCR, Sodium Reduction, and we demanded that chosen technology shall be compared with other technologies different from those we have listed).
-

Concretely

We demanded:

- That the table that shows waste which is to be created should show which waste (marked with a catalogue number) will be removed by incineration or landfilling or will be used in some way.
- That quantity of waste that is to be burned should be as low as possible.
- That limits of POPs content shall be settled for the waste produced by the technology and is to be further treated. The limits should be set for all categories including mud from reservoirs with used oil and for metallic waste.
- Completion of the application by concrete information how and where the metallic waste will be utilized.
- Setting limits for the content of organochlorine pesticides (OCPs) into accordance with the Methodical instruction of the Ministry of Environment (Official bulletin of the Ministry No. 3/196).

- Adding the information about possible releases of hazardous waste from BCD technology and information on how it is secured against the potential of repeating the accident in Melbourne (fire in 1995).
- To set a stricter limit for PCDD/Fs emissions to the air. We also required setting limits for emissions of other POPs (at least HCB and PCBs when in case of PCBs we considered as more effective to set I-TEQ as common together with PCDD/Fs)
- To substantiate why limits for emissions of heavy metals were not defined (first of all of mercury and cadmium) with the respect to the locality where decontamination will be made – in the area of Spolana there is an object of an Old Amalgam Electrolysis contaminated by mercury and POPs. (Objects and area of Old Amalgam Electrolysis are waiting for clean up).
- We required 50% reduction of total quantity of volatile organic compounds (VOC) and rigid contaminants released to the air from current 150 kg/time of operation both for volatile organic compounds and rigid contaminants to at least 75 kg/time of operation.
- To strengthen the limit for waste water releases to the level required for emissions of waste water from waste incinerators, i.e. to 0.3 ng/l expressed at I-TEQ. We also demanded defining limits for concentrations of organochlorine pesticides, HCB and PCBs in released water.
- Elaborating possibilities to reduce the decontamination of waste water in entries to special waste water treatment plant
- Adding a relation to liquidation of ecological burden – Old Amalgam Electrolysis in Spolana Neratovice.
- To made stricter the monitoring proposed in the documentation in many respects – mainly frequency and what kind of chemicals will be monitored (we listed concrete chemicals – Lindane, HCB, heavy metals, PCBs).
- Adding monitoring of water in the Labe River.

7. Course of negotiation

Two negotiations took place within the IPPC procedure, see 3.- Time course of the IPPC procedure. It took place in the building of the Local Authority. Participation in the negotiation is not compulsory for the participants but it is the last possibility where they can enforce their comments before the office makes decision about the integrated permission.

The negotiation can be summarized in following points:

a) The official of the Local Authority started the procedure
b) Introduction of the participants
c) Information about the rules of negotiation
d) Authorities and participants read their comments to the application. Comments of those who were not present were read by the official who led the negotiation.
e) Particular points were solved. A statement of the expert form Cenia served as basic material which was projected on the wall so that all participants could watch the discussed points. The official said that disputable points will be solved by the Local Authority. Points upon which the participants agreed were written to a protocol.
f) The Local Authority wrote reports about the negotiations, signed by the participants. Everyone got a copy of the report from that particular day of negotiation.

7.1 The most important disputable points submitted and presented by Arnika, which were solved during the negotiation:

- to compare chosen elimination technology with other available technologies
- atmosphere: emission limits for PCDD/Fs, PCBs – frequency of monitoring + emission limit
- waste water: emission limits for PCDD/Fs (defining emission limit as done for hazardous waste incinerators)
- issue of mercury: shall it be monitored at all, with which frequency of measurement
- issue of DDT: shall it be monitored at all, with which frequency of measurement
- burning of 52 tonnes of waste without decontamination of non incineration technology

7.2 Settlements of the listed points – comments made by Arnika – by the participants, office and expert

- comparison with other technologies – the expert settled this comment in his written statement as follows: *"The comparison was made, the named technologies are applicable in Spolana, but their use is not documented in the application. Theoretically, application of these technologies in terms of the waste existing in the activity is in no way broader than when using BCD technology. Comparison of effectiveness is irrelevant in the light of the named facts."* The office accepted this during the negotiation as a fact and this issue was not further discussed.

- problem of PCDD/Fs – emission limits: setting a stricter emission limit was not achieved, frequency – the Local Authority decided about the reduction of frequency (once in 14 days in the first 3 months and later once in 3 months , and also within any significant intervention to emission monitoring system or technological process or within an important change of processed raw materials in 3 months after any of the named changes was made) in case the technology will observe the valid emission limit (I-TEQ PCDD/F 0,1 ng/m^3).

- Issue of PCBs: emission limits: setting a stricter limit was not made – the expert and the Czech Environmental Inspection pointed out a valid emission limit which, as they said, takes into account a character of these chemicals and their possible environmental impacts. The office decided about the emission limit in the issued decision.

- Issue of mercury: we succeeded in including the monitoring of Hg (frequency: twice a year + setting the emission limits even though operator of BCD technology (applicant for IPPC) originally did not include this to the project.

- Issue of DDT: emission of DDT will be measured twice a year though the issue of DDT was not initially included in the project – the same as in the case of mercury

- Issue of wastes: - burning of 52 tonnes of waste without decontamination by non incineration technology: there were impacts on wood and textile. Arnika managed that this waste will not be burned without the decontamination, it will be decontaminated.

- PVC waste – Arnika managed on the base of comments submitted already in the EIA procedure that the PVC waste will be separated, will not be burned but liquidated in another legal way.

- Emission limit for PCDD/F for waste water: the expert proposed the limit of 5 ng/l. Arnika managed that the limit was reduced in half to 2,5 ng/l.

7.3 Settlement of comments made by other participants

Central Bohemian Local Authority enforced its comments in the strongest way. The main discussed and resolved comments were as follows:

- Issue: frequency of sampling and evaluation of the samples, rigid contaminant , completing the monitoring by HCH (5 isomers), PCB, polychlorinated phenols (PCP), HCB and DDT and its degradation products, issue of ecotoxicity tests of decontaminated soil and detritus

- Waste water: the region also demanded reduction of emission limit to 0,3 ng/l, quote off the record (15): Central Bohemian Region *"on the base of relevant arguments of Spolana Neratovice cases from the emission limit 0,3 ng/l and agrees with the proposed emission limit 5 ng/l, the limit 0,3 ng/l will be observed in draining point K10 to surface water, sample of mud from Spolana´s water cleaning plant will be taken each month in the first 3 months to find out if it contains PCDD/Fs"*. (K10 is a place where the cleaned waste water is released from Spolana to surface water).

Spolana was also pushing its comments forward, for instance:

- comments concerning the monitoring of PCDD/F (monitoring more frequent – once in a month)

- requirement to widen the emission monitoring of PAH and PCB, increasing the frequency of measurement once for 1 000 tonnes (waste, extracts + content of organic pollutants in dry material)

- burning of 52 tonnes of waste without decontamination

8. Decision about the application for Integrated Permission

The office made the decision about the integrated permission on 9 May 2005. It was sent as a letter to all participants with an instruction saying that an announcement about a recall against this decision can be sent to the Ministry of Environment in 15 days after the announcement of the decision (according to provision § 53 section 1 of the Law No. 71/1967 on administrative procedure) with the mediation of the office's department of environment and agriculture in Prague 5, Zborovská 11, 150 21.

The decision became valid as of 31 May 2005 because none of the proper participants made a recall against it. The decision was published on 6 June 2005 on the web pages of the Ministry of Environment. (14)

9. Conclusion

Arnika actively tried to enter the IPPC procedure within its entire course. Arnika wrote a list of comments and sent them to the Local Authority. It enforced its comments repeatedly and also participated in the two verbal negotiations. It did not succeed in asserting some of them but we think that the Local Authority, despite a responsible approach to this environmental issue, did not make a use of its legal competency, for example in terms of setting stricter conditions of operation or stricter emission limits for hazardous chemicals.

Summary

The IPPC procedure is very complicated but an important licensing procedure. As we said in the beginning, its aim is to achieve a high level of environmental protection and protection of human health. It can be achieved first of all by setting the strictest conditions for operation and stricter checkups of the plants. Settlement of the best operational conditions for any plant can be achieved only by introduction of the Best Available Techniques and Best Environmental Practices, by settlement of strict limits for hazardous waste and their monitoring that would concern mainly the chemicals which can have a negative impact on human health and environment. The best solution would be if the hazardous chemicals will not be used in production at all, but this is difficult to implement immediately even though the impact of many chemicals on human health and environment is not known.

The EU tries to protect its citizens and environment. Now it has developed several various but targeted activities:

1) POPs – the issue related to the Stockholm and Basel Conventions – for instance limits for the content of POPs in waste. More information about POPs and EU´s activities in on *http://europa.eu.int/comm/environment/pops/index_en.htm or* *http://europa.eu.int/comm/environment/dioxin/index.htm*
Legal steps on the EU level, seminars for member states etc.

2) Chemical policy REACH – *www.arnika.org/reach* or EU:
http://europa.eu.int/comm/environment/index_en.htm

3) EU Mercury Strategy – mining and sources of mercury (natural or anthropogenic), usage and consumption (where and in which quantities), substitution of mercury, emissions to environment, monitoring etc. 4. - *http://europa.eu.int/comm/environment/chemicals/mercury/*

4) Prevention of chemical accidents -
http://europa.eu.int/comm/environment/seveso/index.htm

5) Climate changes - *http://europa.eu.int/comm/environment/climat/home_en.htm*

6) More information at **European Commission** website -
http://europa.eu.int/comm/environment/index_en.htm

The EU has developed these ideas and activities on the European level but it tries to support similar ideas globally. For example, it has tried to support the idea of IPPC, i.e. usage of BAT and Best Environmental Practices via the international conventions such as the Stockholm

Convention in which a "BAT/BEP Expert Group" was established to work out BAT/BEP guidelines.

We can also summarize a couple of important general points and knowledge concerning the IPPC procedure:

1. Checking web pages about IPPC of the Ministry of Environment, official notice boards of particular municipalities
2. Applying in time to the procedure
3. Reading the application and its appendices, working out comments
4. Sending the comment in time to the regional office (and making a copy of it for your own records)
5. Reading through the statement of the expert published on the web pages of the Ministry of Environment
6. Taking part in the negotiation (if it is possible), and in case your comments are not properly discussed, insist on that
7. Decision of the regional office offers two possible types of responses:
    1) Not to make a recall against the decision made by the office in case you think that the office settled sufficiently strict conditions and emission limits for the plant's operation.
    2) Making a recall against the decision if you believe that the office did not set strict enough conditions for the operation and emission limits. In the recall you must substantiate (explain) all your remarks on the basis of legislation (Czech or European, or according to corresponding international conventions).

References

(1) Law No. 76/2002 on IPPC *http://www.env.cz/__c1256e7000424ac6.nsf/Categories?OpenView&Start=1&Count=30&Collapse=13#13*
(2) EU – IPPC - *http://europa.eu.int/comm/environment/ippc/*
(3) Webpages run by the Ministry of Trade and Industry together with the ministries of environment and agriculture, CENIA and the Czech Environmental Inspection *www.ippc.cz*
(4) Websites of the Ministry of Trade and Industry - *www.mpo.cz*
(5) Ministry of Environment - *www.env.cz*
(6) Ministry of Agriculture - *www.mze.cz*
(7) CENIA - *www.cenia.cz/www/webapp.nsf/startpage*
(8) Czech Environmental Inspection *http://www.cizp.cz/(knvz5q45fzoxcmjrlbo2ye45)/Default.aspx*
(9) Ministry of Environment – website about the IPPC - *www.env.cz/ippc*
(10) Webpages on EIA – dioxins in Spolana – removal of old ecological burden *http://www.ceu.cz/eia/is/info.asp?kodAkce=MZP044*
(11) Brief nontechnical summary of data listed in the application *http://www.env.cz/www/ippc.nsf/$pid/MZPXXF7TYZXR/$file/strucne%20netechnicke%20shrnuti%20DIOXINY%20Spolana%20.doc*

(12) Expert‘s statement
http://www.env.cz/www/ippc.nsf/$pid/MZPXXF91OF1F/$file/vyjadreni%20OZO%20-%20BIJO%20CZ%20a%20CEU.doc
(13) Decision of the Central Bohemian Regional Office
http://www.env.cz/www/ippc.nsf/$pid/MZPXXFA8C2NI/$file/rozhodnuti%20bcd.doc
(14) Record of the negotiation on 4.4.2005
(15) Record of the negotiation on 11.4.2005

Abbreviations –

APS - air protection system
BAT – best available techniques
BCD – based catalyzed decomposition
CO – carbon oxide
ČIŽP – Czech Environmental Inspection
d - day
DDT – dichloro-diphenyl-trichloroethane
EIA – Environmental Impact Assessment
GPCR – Gase Phase Chemical Reduction
h - hour
HCB – hexachlorobenzen
HCH - hexachlorocyclohexan
IPPC – Integrated Pollution Prevention And Control
ITD - indirect thermal desorption
I-TEQ – international toxicity equivalents
kW – kilo watt
m^3 – cubic meters
MW – mega watt
ng - nanogram
OCP – organochlorine pesticides
OAE – old amalgam electrolysis
OZO – experts
Pa – Pascal
PAH – polyaromatic hydrocarbons
PCB – polychlorinated biphenyls
PCP - polychlorinated phenols
PCDD/Fs - polychlorinated dibenzo-*p*-dioxin / polychlorinated dibenzofuran
POPs – persistent organic pollutants
TOC – total organic carbon
Tonne – 1,000 kg
VOC – volatile organic compounds

Appendices

Appendix 1 - **Appendix 2 to the Law No. 76/2002 - List of the main pollutants for settlement of emission limits**

Atmosphere

1. Sulphur dioxide and other sulphur compounds
2. Nitrogen dioxide and other nitrogen compounds
3. Carbon dioxide
4. Metals and their compounds
5. Volatile organic compounds
6. Dust
7. Asbestos (suspended particles, fibre)
8. Chlorine and its compounds
9. Fluorine and its compounds
10. Arsenic and its compounds
11. Cyanides
12. Chemicals and products which are proved to have carcinogenic or mutagenic effects or that might affect reproduction
13. Polychlorinated dibenzodioxins and polychlorinated dibenzofurans

Water

1. Organic compounds of halogens and chemicals which may create these compounds in a suitable atmosphere
2. Organic compounds of phosphorous
3. Organic compounds of tin
4. Chemical and products which are proved to have carcinogenic or mutagenic effects or that might affect reproduction.
5. Persistent hydrocarbons and persistent and bioaccumulative toxic organic chemicals
6. Cyanides
7. Metals and their compounds
8. Arsenic and its compounds
9. Biocides and products for plant protection
10. Materials in suspension
11. Chemicals contributing to eutrophication (mainly nitrates and phosphates)
12. Chemicals having negative impact on oxygen balance (and can be measured by Biological consumption of oxygen, Chemical consumption of oxygen etc.)

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